JOB OFFER – STUDY ENGINEER - CDD
Study Engineer specializing in development of tools for HPC

OFFER INFORMATION

Reference: COOP-24-DA-01   **Location:** 42 Avenue Gaspard Coriolis – 31057 Toulouse
Team: COOP   **Contact person**: Dauptain Antoine, Thibault Marzlin

Period: 12   months - from: 19/08/2024
Salary: from 29 K€/year (gross) depending on qualifications and experience
Level of education required: Master

Key words: CFD, Python, Tool Development, HPC, Scientific Computing

CERFACS

Cerfacs is a private research, delevopment, transfer and training center for modeling, simulation and high-performance computing. Cerfacs designs, develops and proposes innovation software methods and solutions to meet the needs of its partners in the aeronautics, space, climate, environment and energy sectors. Cerfacs trains students, researchers and engineers in simulation and high-performance computing.
Cerfacs works closely with its seven partners: Airbus, Cnes, EDF, Météo France, Onera, Safran et Total.

HOSTING TEAM - COOP

In the ALGO-COOP team, the COOP group focuses on transversal activities aimed at improving, optimizing and deploying scientific codes at a pace compatible with team life. It collaborates with scientific groups involved in European projects, Cerfacs associate design offices, and the Cerfacs teams themselves. Most of our projects are developed in open-source and are accessible on the Cerfacs gitlab: https://gitlab.com/cerfacs. You can find out more about the COOP Group's objectives on our blog: https://cerfacs.fr/coop.

CONTEXT

Coop is playing a key role in technological transfer in between Cerfacs and one of its shareholder Safran with the development of HPC environment around AVBP: a high fidelity combustion code. This environment includes various tools linking low and high fidelity as well as post-processing, data setting (IHM) and large-scale automated workflows. A significant part of those tools are co-developed through the European Center of Excellence : Excellerat P2.

MISSION

You develop a set of tools and provide support for the industrialized tools of Cerfacs.
You contribute to various project and European Center of Excellence through the development of large-scale workflows
You set up containers (Singularity) directed towards HPC usage.

17/07/2024

DESIRED PROFILE

- You have a Master's degree or a PhD related to scientific computing or HPC
- You have experience in scientific programming: Fortran (>6 months), Python (>12 months).
- You have professional experience in HPC simulations in CFD domain.
- You have experience using Git/Gitlab and setting up containers.
- Some experience in software development, particularly focusing on CI, tests, lint and bloaters is a plus.

WHAT WE OFFER AT CERFACS

- Broad access to technology, a rich interpersonal environment, in-house skills recognized nationally and internationally.
- An inclusive and equitable work environment.
- A structure accessible to people with disabilities.
- A complementary health insurance scheme offering excellent health care coverage in addition to social security, with the possibility of enrolling family members (spouse and children).
- 6 weeks' annual leave (with the possibility of 22 extra days' leave per year linked to your choice of a 39-hour rather than 35-hour working week).
- Flexible working arrangements, with the possibility of working from home up to two days a week.
- A sustainable mobility package enabling employers to pay up to a maximum of 500 euros a year to cover the home-to-work travel costs of staff who cycle to work.

HOW TO APPLY ?

To apply, please send your CV and covering letter to dauptain@cerfacs.fr and marzlin@cerfacs.fr , applications are open until 30/09/2024.

See you soon at CERFACS!

17/07/2024